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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,656	06/26/2001	Atsushi Oohashi	Q64995	9112
7590 06/29/2005				
SUGHRUE, MION, ZINN, MACPEAK & SEAS 2100 Pennsylvania Avenue, N.W. Washington, DC 20037			EXAMINER GONZALEZ, JULIO C	
			ART UNIT 2834	PAPER NUMBER

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

28

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/888,656	OOHASHI ET AL.	
	Examiner	Art Unit	
	Julio C. Gonzalez	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2005.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 15 is/are pending in the application.  
     4a) Of the above claim(s) 6-13 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-5 and 15 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusase et al (US 6,181,043) in view of Aversten (US 2,711,798).

Kusase et al discloses stator for a dynamo electric machine having a stator core (see figure 4) and the stator winding having a plurality of conductors 33. Moreover, Kusase et al discloses that the conductors 33 are made of copper (column 3, lines 32, 33) and that the conductors may soldered by using soft solder as a molten metal (column 6, lines 12, 13), which inherently has a lower melting point than copper (material of conductor).

However, Kusase et al does not disclose explicitly having a metal interposed between joined portions.

On the other hand, Aversten discloses for the purpose of avoiding melting metallic members and avoiding oxidizing the melted metal that it is well known in the art to interpose melted metal such as silver between metallic members

(column 2, lines 60-68). Moreover, it is disclosed that the soldered must have a lower melting point than the metallic members (column 2, lines 64, 65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a stator winding for a generator as disclosed by Kusase et al and to modify the invention by interposing a molten metal with a lower melting point between two metallic members for the purpose of avoiding melting the metallic members and avoiding oxidizing the melted metal as disclosed by Aversten.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusase et al and Aversten as applied to claim 1 above, and further in view of Baines (US 4,705,972).

The combined stator winding discloses all of the elements above. However, the combined stator winding does not disclose using the alloy of the conductors and an additive metal for a molten metal.

On the other hand, Baines discloses for the purpose of making an efficient connection of a lead wire to a motor contact that it is well known in the art to use copper or a copper alloy as a molten metal (column 1, lines 15-18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined stator winding as disclosed above and to use a molten metal alloy for the purpose of making an efficient connection of a lead wire to a motor contact as disclosed by Baines.

4. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusase et al, Aversten and Baines as applied to claims 1 and 2 above, and further in view of Seki et al (US 5,698,929).

The combined stator winding discloses all of the elements above. However, the combined stator winding does not disclose explicitly using tin as a molten metal.

Although it is well known in the art to use tin or tin alloy as a soldering metal, Seki et al has provided to show that such use of metals, tin, silver and alloys, are generally used as a molten metal for soldering. Seki et al discloses for the purpose of avoiding reduction in the bonding strength, thus ensuring a proper motor function that silver, tin and alloys may be used as solder metals (column 4, lines 30-41).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined stator winding as disclosed above

and to use tin or silver as solder metals for the purpose of avoiding reduction in the bonding strength, thus ensuring a proper motor function as disclosed by Seki et al.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusase et al and Aversten as applied to claim 1 above, and further in view of Umeda et al (US 6,124,660).

The combined stator winding discloses all of the elements above. However, the combined stator winding does not disclose that the metal is placed without covering the outer end surfaces and edges of the end portions.

On other hand, Umeda et al discloses for the purpose of preventing corrosion against water in generators, a stator (see figure 8) having joined portions 61d, which are joined by a metal 61e and the metal 61e does not cover the outer end surfaces and edges of the joined portions 61d (see figure 7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined stator winding as disclosed above and to modify the invention by placing metal without covering the outer end surfaces of joined portions for the purpose of preventing corrosion against water in generators as disclosed by Umeda et al.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusase et al, Aversten and Baines as applied to claim 2 above and further in ordinary skill in the art.

The combined stator discloses all of the elements above. However, the combined stator does not disclose using the material for the additive metal.

It would have been obvious to use the material use for the additive metal (Cu-P), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In *re Leshin*, 125 USPQ 416.

### ***Response to Arguments***

7. Applicant's arguments filed 04/26/05 have been fully considered but they are not persuasive.

It is well known in the art to interposed soldered in between two metal pieces using a metal with a lower melting point, as taught by Aversten (column 2, lines 62-65). Kusase et al teaches that metal windings can be soldered and the soldered must have a lower melting point than the metal of the soldered (column 6, lines 12, 13).

Respectfully, anyone with ordinary skill in the art would soldered two metal pieces (windings) by interposing soldered in between the windings (metal pieces). One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

8. In response to applicant's argument that Kusase teaches away from the secondary reference, Aversten, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).



***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is 571-272-2024. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Julio C. Gonzalez  
Examiner  
Art Unit 2834

Jcg

June 23, 2005

  
DARREN SCHUBERG  
SUPERVISORY PATENT EXAMINER  
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